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# 134

# Eastern Europe Agricultural Situation

Review of 1976 and  
Outlook for 1977



United States  
Department of  
Agriculture

Economic  
Research  
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**ABSTRACT:** In 1976, agricultural production increased in Bulgaria, Romania, and Yugoslavia, and decreased in Czechoslovakia, the German Democratic Republic (GDR), Hungary, and Poland. Grain, rapeseed, and soybean production reached record levels, despite drought in Czechoslovakia, the GDR, Hungary, and Poland. Cattle and hog numbers declined; poultry increased. U.S. agricultural exports to the region were at a record high. Medium term plans call for a faster increase in crop than in livestock production and for reduced grain imports.

**KEYWORDS:** Eastern Europe, weather, crops, livestock, food consumption, agricultural trade, agricultural plans.

## FOREWORD

This report reviews and analyzes major developments in the food-and-fiber sectors of Eastern Europe during 1976 and provides information on the outlook for 1977. Emphasis is given to agricultural developments of major concern to the United States, especially developments affecting the outlook for foreign trade of farm commodities.

The report updates and supplements data found in Foreign Agricultural Economic Report No. 117, *The Agricultural Situation in Eastern Europe: Production and Trade Statistics, 1970-75*. It is one of seven regional publications on the world agricultural situation. Other reports are being published on the USSR, Western Europe, the Western Hemisphere, Africa and West Asia, Asia and Oceania, and the People's Republic of China.

Thomas A. Vankai directed and coordinated the preparation of this report. Sections of the report were written by Andrew A. Duymovic, Miles J. Lambert, and Thomas A. Vankai. Carolyn E. Miller assisted in the compilation of statistical data. Information submitted by the U.S. Agricultural Attaches in Belgrade, Vienna, and Warsaw is acknowledged with appreciation.



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## ABBREVIATIONS AND TERMS

### Abbreviations

CCC = Commodity Credit Corporation  
CEMA = Council for Mutual Economic Assistance  
EEC = European Economic Community  
FAO = Food and Agriculture Organization of the United Nations  
GDR = German Democratic Republic or East Germany

### Terms

Agricultural Land--Cultivated land, gardens, orchards, meadows, and pastures.

Agricultural Trade--Raw materials for food and fiber; feeds; and food and food products.

Carcass weight--Includes meat, edible fat, and edible offals.

Eastern Europe:

Northern Countries--Czechoslovakia, German Democratic Republic, Poland

Southern Countries--Bulgaria, Hungary, Romania, Yugoslavia

Transshipments--United States exports destined to Eastern Europe unloaded in Canada or Western Europe and reported by the U.S. Census Bureau as exports to the port of entry.

### Units

Metric units are used throughout:

One metric ton = 2,204.6 pounds  
One quintal = 100 kilograms  
One kilogram = 2.2046 pounds  
One hectare = 2.471 acres

### Conversion factors

Cowhides: one piece = 20 kilograms  
Milk: one liter = 1.031 kilograms  
Soybeans: one unit = 79.5 percent soybean meal equivalent,  
or 18.0 percent soybean oil equivalent



## CONTENTS

	<i>Page</i>
SUMMARY .....	1
REGIONAL GRAIN RECORD DESPITE DROUGHT IN NORTHERN COUNTRIES .....	2
Record Grain Production .....	2
Grain Import Record Likely .....	3
Outlook for 1977 .....	3
RECORD OILSEED PRODUCTION DAMPENS IMPORT PROSPECTS .....	5
Prospects for Further Increase in 1977 .....	5
Imports of Oilseeds and Oilseed Products Up .....	5
Declines Expected in 1977 Imports. ....	9
OTHER CROPS GENERALLY UP IN SOUTH; DOWN IN NORTH .....	9
Sugarbeets .....	9
Potatoes .....	9
Fruits and Vegetables. ....	10
Cotton .....	10
Tobacco .....	10
LIVESTOCK PERFORMANCE DISAPPOINTING .....	11
Livestock Expansion Set Back .....	11
Meat Production Off in 1976. ....	12
Slight Increase in Dairy and Egg Output. ....	12
SATISFYING CONSUMER DEMAND FOR FOOD A MAJOR CONCERN .....	13
TRADE DEFICITS REMAIN LARGE. ....	15
Mounting External Debts .....	15
Decreased Deficit in Total Trade .....	15
Agricultural Trade Deficits .....	16
AMBITIOUS AGRICULTURAL PLANS FOR 1976-80 .....	16
APPENDIX .....	18
Press Release on the Understanding on Grain Trade Between the United States and Poland, November 17, 1975 .....	18
Press Release on the Exchange of Views on Prospects for Trade in Grains Between the United States and the GDR, November 10, 1976 .....	18

## TEXT TABLES

<i>Table</i>	<i>Page</i>
1 Grain trade, Eastern Europe, 1971/72-1976/77. . . . .	4
2 Estimated oilseed meal imports, Eastern Europe, 1976-77 . . . . .	6
3 Imports of soybean meal and soybeans in meal equivalent, Eastern Europe, 1971-77 . . . . .	7
4 Sources of imported soybean meal and soybeans in meal equivalent, Eastern Europe, 1971-77 . . . . .	8
5 Growth in per capita income and meat consumption, Eastern Europe, 1970, 1975, and 1980 plans. . . . .	14
6 Average annual growth rates in gross agricultural production, Eastern Europe, 1971-75, 1976, and plans for 1977 and 1976-80 . . . . .	17

## APPENDIX TABLES

7 Area of grains, Eastern Europe, annual 1971-76 . . . . .	20
8 Production of grains, Eastern Europe, annual 1971-76 . . . . .	21
9 Area of selected crops, Eastern Europe, annual 1971-76 . . . . .	22
10 Production of selected crops, Eastern Europe, annual 1971-76. . . . .	23
11 January livestock numbers, Eastern Europe, 1971-77. . . . .	24
12 Production of principal livestock products, Eastern Europe, annual 1971-76. . . . .	25
13 Trade in selected agricultural commodities, Eastern Europe, 1968-75 . . . . .	26
14 Volume and value of U.S. agricultural exports to Eastern Europe, including transshipments, 1969-76. . . . .	32
15 Volume and value of U.S. agricultural imports from Eastern Europe, 1969-76. . . . .	36



# Eastern Europe Agricultural Situation

## Review of 1976 and Outlook for 1977

### SUMMARY

Gross agricultural output in 1976 was up in Bulgaria, Romania, and Yugoslavia; down in Czechoslovakia, the German Democratic Republic (GDR), Hungary, and Poland. A prolonged drought in the northern countries and Hungary reduced yields of many crops, particularly forages. Despite the drought, Eastern Europe's total grain harvest of more than 93 million tons was a record. Rapeseed, soybeans, and tobacco harvests also attained alltime high regional levels. In the southern countries, vegetable and fruit production registered gains. Sugarbeet production declined slightly; but, with the exception of Poland, an increase in sugar content was reported. Although the harvested area of potatoes declined, production increased. Forage crops, meadows, and pastures were the most seriously hurt by the drought.

The decline in crop production in the northern countries cut into domestic feed supplies and caused distress hog slaughter. Except for poultry and sheep, regional totals of livestock numbers declined. Poland suffered the most serious setback. Hog numbers there declined by 22 percent.

As a consequence of lower livestock inventories, total meat production in the region declined 2 percent. A decline in pork production was partially offset by an increase in poultry meat production. Milk and egg production increased slightly.

Declines in domestic meat production, rising incomes, and stable meat prices caused intermittent, local meat shortages, mainly in Poland and Czechoslovakia. The Polish Government's proposal for retail food price increases ran into serious opposition and was withdrawn.

To avoid more serious livestock retrenchments, it became necessary to increase imports of concentrated feed. Grain output, while a record in the region, remained below trend in four of the seven countries. Since 1976 was the second con-

secutive year of a shortfall in grain output in Czechoslovakia, the German Democratic Republic, and Poland, reserves there had been depleted. The United States, with increased export supplies of grain and soybean products, helped satisfy the affected countries' growing feed requirements. The United States supplied about 7 million tons, more than half of the region's grain imports. The region increased its soybean meal imports (including soybeans on a meal basis) by 15 percent, and the U.S. share rose from 43 percent in 1975 to close to 50 percent in 1976.

The total value of U.S. agricultural exports to the region (including transshipments) reached a high of \$1.3 billion in 1976. Despite easing grain prices, grain accounted for more than two-thirds of the U.S. export value, followed by soybeans and soybean products, accounting for 13 percent. The East European deficit in agricultural trade with the United States deteriorated in 1976, despite increases in the volume and value of Eastern Europe's ham and other pork product exports to the United States.

Poland had to step up its meat imports and reduce raw meat exports. In the northern countries, a decline in export supplies of agricultural products and additional feed imports heavily taxed total trade balances.

The harvest outlook for 1977 for Eastern Europe was favorable as of the end of March. Planned sowing was almost completed in the fall and no unusual winterkill was reported. Some water damage occurred in February, however.

If grain production returns to trend levels, grain imports may decline to about 10 million tons in 1977/78. The United States will likely supply about 4 million tons of grain to the GDR and Poland, in accordance with informal understandings with those countries. A small decrease in total East European imports of oilseeds and

products is also likely. Poland will have to continue importing meat, probably to the extent of 100,000 tons.

The medium range plans for 1976-80 call for faster increase in crop than in livestock production. The plan for crop production growth is

ambitious; the annual average grain production target is 106-110 million tons. Substantial increases are targeted for oilseeds and sugarbeets. Greater use of fertilizers and machinery, as well as technological and managerial improvements, should contribute to increased production.

## REGIONAL GRAIN RECORD DESPITE DROUGHT IN NORTHERN COUNTRIES

Lack of adequate rainfall was a serious problem in 1976 in the northern countries of Eastern Europe. The low precipitation throughout the vegetation period gradually reduced soil moisture by August to one-third of normal in the GDR, and to about one-half of normal in Czechoslovakia. Soil moisture was also below normal in Hungary and Poland. Low soil moisture was especially damaging on loose, sandy soils. Poland has large areas of light soils, and crops there suffered relatively more than the about 20-percent-below-normal soil moisture would indicate. In contrast, the southern countries except for Hungary had adequate rainfall until July and above average rainfall in the successive months.

Weather conditions throughout Eastern Europe generally were favorable for sowing in the fall of 1976. An extreme soil moisture deficit persisted in the GDR through the end of 1976, but, by January 1977, the soil moisture had rebuilt to about three-quarters of normal. December temperatures were slightly below average in the northern countries, but snow cover was adequate. January turned out to be milder than average in all of Eastern Europe, and there were no reports of winterkill.

In early February, water levels of some rivers were dangerously high in parts of Czechoslovakia, Hungary, and Yugoslavia. Floods inundated 5,000 to 10,000 hectares in Czechoslovakia and Yugoslavia, and ground water damaged more than 100,000 hectares in Hungary.

### Record Grain Production

Regional grain output set a record in 1976. But despite the overall good production results, 1976/77 grain imports will likely reach new highs. Production remained below trend in the regular grain importing countries of Czechoslovakia, the GDR, and Poland. A more serious shortfall occurred in the nongrain feed harvest; consequently, grain reserves were used up. Although hog inventories were down as of January 1977,

farmers need the security of adequate reserves to rebuild herds. An increase in the number of hogs is being officially promoted—especially in Poland.

Small grains ripened a few weeks earlier than normal in Eastern Europe because of the prolonged dry conditions. However, corn was slow to develop in the earlier stages and ripened later than usual in the fall. The quality of the small grains harvested was good. However, most of the corn had a high water content when it was harvested, so it is susceptible to quality deterioration and spoilage.

Total grain output is estimated at more than 93 million tons, a record high. The reported Romanian grain harvest was 17 percent, or 2.9 million tons above the previous record reached in 1972.

Most grains developed well until early summer, when the drought in the northern countries and Hungary, lasting from June to August, turned the outlook gloomy.

Not until September, after the small grain harvest was completed, did it become known that the drought-inflicted losses were not as serious as feared earlier. The drought caused greater than usual variations in yields between well managed and poorly managed farms, and between farms operated under good or inferior soil conditions.

In 1976, as in the previous 4 years, total harvested grain area in Eastern Europe remained the same, occupying about 53 percent of arable land. However, in Poland the grain area has gradually declined and in 1975/76 was down by 700,000 hectares from the level of 4 years earlier. Polish authorities are concerned with this downward trend, and a rebound of 400,000 hectares has been targeted for the 1977 crops. The GDR, the other chronic grain-deficit country, also plans some area increases.

Wheat is the major grain in Eastern Europe, with 35 percent of the total harvested grain area, followed by corn, with 27 percent. Corn is the leading grain in Hungary, Romania, and Yugoslavia. Because wheat, corn, and barley



have higher yields, the area of these grains has been expanding at the expense of rye and oats. In 1976, after several years of small-scale experiments, Poland introduced a short-vegetation variety corn for grain on 50,000 hectares. Since the results were satisfactory, corn production is being promoted, and sown area is expected to double by 1980, and may reach 400,000 hectares in the long run.

Average grain yields in the region increased annually from 27.3 quintals per hectare in 1971 to 32.1 quintals per hectare in 1976. The only dip in the trend occurred in 1975. The 1976 average yield reflects both the drought-reduced yields in the northern countries and Hungary and the outstanding results in Romania, where weather conditions were favorable.

Growing use of fertilizers, herbicides, and pesticides and their improved scientific application is one of the primary reasons for the relatively good yields. In addition, new, more drought- and disease-resistant seed varieties were sown. Also, production has become more mechanized, specialized, and systematized.

Comparatively favorable producer prices served as an incentive in planting grains. Government purchase prices assured farmers a guaranteed revenue in each country. Also, in Hungary, Poland, and Yugoslavia, free market activities are tolerated.

In addition to favorable producer prices and administrative guidelines, most of the respective Governments influence planting decisions by contracts. The contracting farmers get priority delivery days, advance payments, special seeds, and fertilizers under favorable terms. In Poland, a policy to tie farmers' pensions to the quantity of products delivered to the state buying agencies has been discussed recently.

Higher import prices and increased costs of production during 1976 forced Hungary, Poland, and Yugoslavia to readjust prices and commodity price relationships. Consequently, at mid-year, average producer prices for grains in Hungary and Yugoslavia were raised about 10 percent and in Poland, about 40 percent.

#### **Grain Import Record Likely**

Despite the regional record grain output and about a 4-percent decline in hog numbers during 1976, July 1976-June 1977 grain imports may surpass 14 million tons—the largest level of imports ever for the region (table 1). The need for stepped-up imports has arisen from the depletion of grain reserves in the northern countries and the drought-

inflicted forage losses of 20 to 30 percent. In addition, Poland is determined to rebuild its hog inventory.

Polish officials indicated that they will buy 6 to 7 million tons of grain during July 1976-June 1977. The import requirement is estimated at 4.5 million tons in the GDR, and 2.5 million tons in Czechoslovakia. Yugoslavia reportedly will import about 500,000 tons of wheat from Romania in 1977, but has an exportable surplus of about 800,000 tons of corn. Hungary had to cut exports of wheat to less than 500,000 tons because of a bad corn crop. In Romania, exports may reach close to 1.5-2 million tons.

During July 1975-June 1976, the United States supplied about half of Eastern Europe's grain imports of 11.8 million tons. It is expected that the United States will maintain this share during the current marketing year. During July-December 1976, the United States exported about 4.6 million tons of grains to Eastern Europe, compared with 3.0 million during the same period in 1975. On December 31, Poland still had \$74 million in outstanding CCC credit for wheat purchases. The United States has a long-term understanding for steady grain exports to Poland and the GDR. (See statements on understandings in appendix.)

The USSR, another major source of East European grain imports, supplied an estimated 3 million tons in 1976/77. Canada has a 3-year agreement with Poland to deliver 750,000 to 1 million tons by 1979. Argentina is committed to sell about a combined 1 million tons to Poland and the GDR during the present marketing year.

#### **Outlook for 1977**

Since the 1977 plans call for faster growth of domestic grain than livestock production, grain imports may decline to about 10 million tons, barring extreme weather conditions. The United States may supply about 4-5 million tons. The bulk of East European grain imports is for feed. Rice imports of 270,000 to 300,000 tons annually will be maintained.

Prospects for all fall-sown crops are promising. Soil moisture was adequate for planting and germination was good. Even late-sown grains developed satisfactorily before winter. The area sown in the fall did not change significantly from the previous year. Poland reported a 60,000- to 70,000-hectare increase in winter grains and Czechoslovakia, a 28,000-hectare increase. Yugoslavia, on the other hand, experienced a slight decrease. (Thomas A. Vankai)

Table 1--Grain trade, Eastern Europe, 1971/72-1976/77 1/

Year ending June 30	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total
Imports:								
1972	0.1	2.3	2.7	.6	3.7	.4	.4	10.2
1973	.1	1.4	3.5	1.2	2.5	.3	.6	9.6
1974	--	1.4	2.5	.2	3.7	.6	.8	9.2
1975	1.0	1.3	3.3	.3	3.7	1.0	.4	11.0
1976	.2	1.6	3.4	.4	5.0	.4	.6	11.6
1977 3/	.1	2.5	4.5	.2	6.9	.4	.5	15.1
Exports:								
1972	.5	--	.3	.2	.1	.3	--	1.4
1973	.7	.1	.4	.1	.2	.9	--	2.4
1974	.2	--	.4	2.0	.5	.8	.6	4.5
1975	--	--	.3	1.7	.1	.6	.1	2.8
1976	.4	--	.3	1.9	.1	1.0	.2	3.9
1977 3/	.2	--	.1	.5	.1	1.5	.6	3.0
Net imports: 4/								
1972	-.4	2.2	2.3	.4	3.6	.1	.3	8.5
1973	-.7	1.4	3.2	1.1	2.3	-.6	.6	7.3
1974	-.2	1.4	2.1	-1.8	3.2	-.2	.2	4.7
1975	1.0	1.3	3.0	1.4	3.6	.4	.4	8.3
1976	-.2	1.6	3.1	-1.5	4.9	-.6	-.1	7.7
1977 3/	-.1	2.5	4.4	-.3	6.8	-1.1	-.1	12.1

1/ Excluding rice.

2/ Entries may not add to total because of rounding.

### 3/ Forecast.

4/ Minus denotes net exports.

Source: Foreign Agricultural Service and Economic Research Service.



## RECORD OILSEED PRODUCTION DAMPENS IMPORT PROSPECTS

Total oilseed production<sup>1</sup> in the region was 3.6 million tons in 1976, or 10 percent above the record 1975 level. Acreage rose about 7 percent to nearly 2 million hectares. Most of the production and area increase occurred in rapeseed.

Eastern Europe's rapeseed output hit 1.5 million tons in 1976, or 16 percent above the record crop of 1975. Polish rapeseed production was up 35 percent, reaching a record 983,000 tons. Despite a 20-percent winterkill, acreage was almost 30 percent more than in 1975. Yields were high, since rapeseed ripened before the drought took its toll. Poland's output more than compensated for reductions in Czechoslovakia and East Germany.

Latest reports on sunflowerseed production indicate production of about 1.66 million tons in the southern countries. This is 4 percent above the 1975 total but 8 percent under 1973's record.

Available information indicates that soybean production continued upward in the southern countries, with production up by about 60,000 tons over 1975, to .43 million tons. Romanian production is thought to have rebounded after floods had reduced acreage in 1975, but it is still far short of the record achieved in 1974.

### Prospects for Further Increase in 1977

The outlook for 1977 is for oilseed acreage to expand slightly and, if weather enables yields to follow trends, Eastern Europe's production could reach another record level, perhaps over 3.7 million tons. The acreage increase is based largely on Polish rapeseed. Poland raised producer prices for rapeseed by 11.5 percent in July 1976, with the result that planted acreage is around 450,000 hectares. In Yugoslavia, producer prices for sunflowerseeds and soybeans were raised by 5.5 percent in October 1976, and it can be expected that the acreage of both crops will increase slightly.

Soybean acreage is also likely to expand somewhat in 1977 in the other southern countries. However, it is difficult to predict developments after 1977. Statements from Bulgaria and Romania continue to mention self-sufficiency in oilseeds during the 1976-80 period. Hungary, on the other hand, has indicated that corn/soybean price ratios on the world market and yield differentials between the two crops, which can be easily interchanged, will become the critical factor in expanding acreage.

### Imports of Oilseeds and Oilseed Products Up

Eastern Europe's imports of oilseeds and products rose significantly in 1976, after having shown little growth in 1975 (tables 2 and 3). Vegetable oil imports alone, however, declined by 50-60,000 tons from 1975's high level. Favorable world oilseed meal/grain price ratios spurred buying of oilseed meal by all countries except Hungary and Bulgaria, where some increase in domestically produced oilseeds, and excellent corn crops brought slight declines. In addition to price, below-trend grain production in 1975 and 1976 was a major stimulus in Czechoslovakia and East Germany. Imports of soybeans and soybean meal were enhanced by CCC credit sales to Romania, Poland, and Yugoslavia, as well as by special trade arrangements between Brazil and some of the countries, notably Poland.

Soybean meal imports are estimated to have grown by 10 percent in 1976, while overall oilseed meal imports grew by about 8 percent. This compares to increases of less than 1 percent for each in 1975. Soybean meal continued to rise as a percentage of all oilseed meal imports. Increased sales were also recorded for Indian peanut meal. For the second year in a row, Brazil exported more soybean meal to Eastern Europe than did the United States. However, combined U.S. sales of soybean meal and soybeans made the United States the leading supplier of soybean products (meal basis) (table 4).

Two-thirds of the increase in Eastern Europe's 1976 oilseed meal imports is attributable to Polish and Yugoslav purchases. Romania's imports of oilseeds for processing into meal also showed strong gains. Both Poland and Romania have been intent on augmenting their supplies and usage of oilseed meals. Despite plans for vegetable protein self-sufficiency by 1980, it appears that Romania decided to go slow on soybean production, largely because of world price developments during 1975-76, and to import meal or soybeans instead. Romania replanted flooded soybean acreage with corn in 1975. Corn area expanded again in 1976, whereas soybean area did not reach pre-1975 levels. In Poland, the commitment to expand meat consumption remained the critical factor and made that country, in 1976, the first in the region to purchase over 1 million tons of oilseed meal in a single year. Yugoslav purchases were up following unusually low domestic production of oilseeds in 1975, general depletion of supplies, and in the expectation of increasing meat exports.

<sup>1</sup>Includes rapeseed, sunflowerseed, and soybeans.







Table 4--Sources of imported soybean meal and soybeans in meal equivalent, Eastern Europe, 1971-77

[illegible]

1/ Preliminary.

2/ Estimated.

3/ Forecast.

4/ Detail may not add to total because of rounding.

5/ Romanian soybean shipments to Yugoslavia in 1974 have been included in the total but have not been listed separately because of the small amount involved.

In 1976, U.S. CCC credit to Romania for 228,000 tons of soybeans brought sales of soybeans to Eastern Europe to a record of 400,000 tons, despite a decline in Poland's purchases. Poland's large rapeseed crop in 1975 reduced excess crushing capacity. In a new development, soybean purchases were made by Bulgaria in 1976, reportedly 15,000 tons from Brazil.

Regional imports of vegetable oil, as such, may have declined by as much as 50,000 tons, reflecting increased domestic production in Poland and good carryover stocks (based on 1975 imports) in Yugoslavia. Regional net imports of vegetable oil may have shrunk considerably because of a decrease in imports and an increase in exports by Poland.

#### **Declines Expected in 1977 Imports**

A small decrease in Eastern Europe's import volume of oilseeds and products is likely for 1977. Oilseed meal imports are likely to decline (table 3). Prospects vary by country, but reasons include a decrease in livestock numbers, greater supplies of domestic oilseed meal, and less favorable oilseed meal/grain price ratios.

In the combined imports of seeds and meal from all sources some switch from meal to seeds is expected. Soybean imports are likely to surpass those of 1976. Indications are that Brazil will supply 200,000 tons of soybeans to the GDR. New crushing capacities may bring Yugoslavia's soybean imports up to 100,000 tons. Soybean imports

by Romania and Poland will probably decrease. In Romania, the excellent 1976 crop exceeded crushing capacity. In Poland, production was just about balanced with capacity following the opening of a rapeseed plant of over 200,000 tons capacity in 1976. Soybean crushing capacities are slated to expand in Romania and Yugoslavia in 1978, and in Bulgaria in 1979, probably bringing another surge in imports, since crushing only domestic soybean production is likely to leave capacity underutilized.

Increased crushing capacity means that Eastern Europe's oilseed import demand will have to be considered in terms of combined soybean meal and soybeans (meal basis). In 1977, combined imports will drop slightly because the expected decrease in Romanian and Bulgarian imports will more than offset the estimated increase in the GDR.

Also, a decline in regional imports of vegetable oil, as such, is foreshadowed by a decrease in Poland's imports following its record rapeseed crop. Eastern Europe in aggregate appears now to remain a declining market for imported oils. Only Czechoslovakia and the German Democratic Republic are unlikely to cut imports. The other countries are steadily reducing imports, meeting consumption either with increased domestic oilseed production or with imported seeds to utilize new crushing capacities. The region may become a net exporter of vegetable oils by 1980. (*Miles J. Lambert*)

### **OTHER CROPS GENERALLY UP IN SOUTH; DOWN IN NORTH**

#### **Sugarbeets**

While harvested sugarbeet acreage was up 2 percent in Eastern Europe in 1976, sugarbeet production was about the same as the 1975 record. Record sugarbeet output in Romania, Poland, Yugoslavia, and Bulgaria almost compensated for losses of 28 and 24 percent in Czechoslovakia and the GDR, respectively. Sugar content increased in most countries, but dropped in Poland. Calendar year sugar production in the region decreased by less than 5 percent below the 1975 level of 4.94 million tons.

In 1977, sugarbeet acreage is likely to expand again. This expansion will be led by Poland, where acreage is to reach nearly 800,000 hectares by 1980. Yugoslavia hopes to be an exporter of sugar in 1980. Producer prices were raised by 13.7 percent in October 1975 to promote this plan. However, sugar-

beets still face stiff competition from other industrial crops, especially oilseeds. Bulgaria plans to be self-sufficient in sugar by 1980 and will expand acreage in 1977.

Yugoslav sugar imports in 1976 increased by 200,000 tons above those of 1975, while Polish exports increased by about 260,000 tons. The regional outlook for 1977 is for decreased imports, especially by Yugoslavia, and for about the same level of exports as in 1976, with Romanian exports making up for an anticipated drop in sales from Czechoslovakia and Poland.

#### **Potatoes**

Potato acreage in Eastern Europe decreased 5 percent in 1976, continuing a 6-year decline. However, record production in Romania and near-record performance in Poland lifted the regional



output 7 percent above that of 1975. Output was still considerably below the average output of the excellent 1972-74 period, mostly because GDR production in 1976 declined 17 percent below the already poor 1975 level. Also, large acreage declines in Czechoslovakia since 1973 prevented production from nearing the earlier levels despite the country's second-best yield achievement to date.

### Fruits and Vegetables

Overall production of fruits and vegetables in Eastern Europe in 1976 improved in comparison with 1975's mediocre output, mostly because of the outstanding crop in Romania and Bulgaria. Only plum production in Yugoslavia and vegetable production in Poland detracted notably from a generally good picture. However, market supplies were occasionally tight in the northern countries and Hungary because of periods of drought.

Apple and tomato production in the southern countries was up in 1976 by as much as 12 and 40 percent, respectively. The 41-percent drop in Yugoslav plum production, largely the result of tree disease in 1975, will sharply reduce dried prune production. Yugoslavia's exports of dried prunes in the 1976/77 marketing year are expected to be down to 4,000 tons—one third of the year-earlier level. Grape production increases in Romania, Bulgaria, and Yugoslavia brought regional production up to nearly 5 million tons, 20 percent over 1975. With ample fruit and vegetable supplies to meet local fresh and canned goods consumption, Bulgaria and Romania probably expanded exports significantly, Bulgaria toward the Soviet Union and Romania toward Western Europe.

Bulgaria and Romania plan vigorous production increases in fruit and vegetables during coming years. Concern for exports is equal to interest in improving domestic per capita consumption. Bulgaria will expand vegetable acreage and intensify production of fruit and vegetables. Both countries have rigorous regional specialization plans. Romania also seeks to make each county self-sufficient in vegetables in order to overcome local market shortages which often divert supplies from large cities and exports. Hungary hopes to reverse the declining trend in fruit and vegetable production through price incentives. In January 1977, the producer prices of fruit and vegetables were raised by an average 10 and 15 percent, respectively.

### Cotton

Bulgaria, the only significant producer of cotton in Eastern Europe, experienced a drop in cotton production in 1976, perhaps harvesting not much more than 25,000 tons (unginned). Together with Yugoslav and Romanian output, regional produc-

tion is estimated at 35,000 tons, compared with 41,000 in 1975. Regional acreage in 1976 was near that of 1975, about 37,000 hectares. During the past 2 years, Bulgarian and Yugoslav acreage slipped below previous levels. In Bulgaria, it appears that labor shortages, priority for other crops, and acceptance of a greater reliance on Soviet cotton imports will hasten a two-decade decline in cotton area and production. In Yugoslavia, many farmers have replaced cotton with more profitable tobacco. Romania plans to expand cotton acreage in order to reach a production level of 18-20,000 tons in the 1980's, which compares with 3,000 tons in 1975.

Eastern Europe's cotton imports (ginned) in 1976 probably were slightly below those of 1975. However, with 1974-76 imports averaging about 710,000 tons annually, a new level of usage has been reached. During 1970-73, regional imports averaged only 664,000 tons annually. All countries except Bulgaria contributed to the increase, with Yugoslavia exhibiting the greatest growth in average annual imports. An expected rise in Polish imports in 1977 should raise regional imports above those of 1976.

Soviet cotton accounted for all the increased imports in 1974 and 1975. The small volume of U.S. cotton in this market fell during 1974-76 as sales to Romania and Poland declined. Average annual exports of U.S. cotton were 18,800 tons during that period, compared with 23,400 during 1970-73.

### Tobacco

Eastern Europe's 1976 tobacco production is estimated at an alltime high of 428,000 tons, reflecting record crops in Romania, Yugoslavia, and Bulgaria. Romanian production alone increased by 23,000 tons. Polish acreage increased by 18 percent following a 30-percent increase in producer prices in August 1975, but unfavorable weather caused a minor decline in production.

Exports from Bulgaria, Yugoslavia, and Poland in 1976 and 1977 should keep regional exports near, if not above, the record 1975 level as stocks of fermented tobacco from the large 1975 and 1976 harvests continue to be sold off. U.S. imports from the region hit 11,000 tons in 1976, the highest level since 1971, with Bulgarian oriental leaf playing a stronger role than in past years.

Tobacco imports by Eastern Europe in 1976 are estimated to be down about 2 percent from 1975. Following excellent domestic production, Bulgarian and Yugoslav requirements in 1976 were down from the relatively high levels of 1975. Poland's imports leveled off. With strong production again in 1976, imports in 1977 are expected to be at about the 1976 level. During 1974-76, the



average annual volume of U.S. tobacco exports to Eastern Europe rose compared with that of 1970-73, but still accounted for less than 5 percent of all Eastern European tobacco imports. No change is expected in 1977. An \$8 million line of CCC credit, covering about 2,000 tons of tobacco, was extended to Poland in November 1976.

Consumption and production measures since 1975 have been altering domestic requirements and the structure of tobacco trade in Eastern Europe. Retail price measures in Yugoslavia and Poland and several anti-smoking regulations in Bulgaria are intended to reduce the gap between consumption and production of large-leaf tobacco. Acreage use in the past 2 years shows a relative

increase in area planted to flue-cured varieties in Bulgaria, Yugoslavia, and Poland. Production results have not yet matched this effort. Instead, recent output shows a rise in the volume and proportion of traditional varieties.

Yugoslavia expects total tobacco production to reach 90,000 tons in 1980, so that country's exports of oriental leaf should increase. Bulgaria plans to maintain an annual total production average of 155-160,000 tons during 1976-80 while expanding cigarette exports to CEMA. Unless CEMA price concessions have been made for Bulgarian agricultural goods, Bulgaria's oriental tobacco exports to CEMA may stagnate while increasing to other markets. (*Miles J. Lambert*)

## LIVESTOCK PERFORMANCE DISAPPOINTING

Poor feed supplies continued to cause difficulties in most of Eastern Europe's livestock sectors in 1976. The rapid increase in livestock numbers between 1970 and 1975 greatly increased feed requirements. Although domestic production and imports of livestock feed have also expanded, the absence of adequate feed reserves remains a major hindrance to sustained livestock expansion.

Because of prolonged dry weather in April 1976 and also during June-July, forage production was well below average, causing livestock feed shortfalls in Czechoslovakia, Hungary, the GDR, and Poland. The seriousness of the feed shortages was evident by Government measures to offset the drought effects. After the winter grains were harvested, farmers in each of the affected countries were urged to collect straw and use it as a base for fodder. In Hungary, the burning of straw was forbidden. Unusually large areas were then replanted with fast-growing catch crops to compensate for inadequate forage crops and poor pasturage. East Germany reportedly sowed the second crop on about 20 percent of its arable land. In some countries, such as Hungary, farmers received free seed to encourage the second planting. In some areas, it was necessary to start feeding hay collected for winter reserves. According to reports, the stocks of roughage held by many producers were lower than after the 1975 harvest. Consequently, the 1977 spring harvest of forage crops and good pasturage will be important because of continued inadequate roughage stocks.

### Livestock Expansion Set Back

Most East European countries began 1976 with lowered inventories of major livestock categories.

Plans to expand livestock herds during 1976 were set back because of continued inadequate feed supplies. The drought experienced during 1976 was chiefly responsible for further reductions in livestock numbers by year-end, particularly in the northern countries.

Because of the smaller supplies of forage crops in 1976, there was an earlier than usual switch from roughage to concentrate feeding, resulting in depletion of domestic supplies and higher production costs. Some countries were able to maintain livestock numbers. But in other countries, seasonal slaughter late in 1976 was higher than usual because of the feed shortage.

Hog numbers in the region registered the sharpest decline, and are estimated to have totaled about 63 million head on January 1, 1977, 4 percent below the year earlier level (table 11). The sharpest decline occurred in Poland, the largest pork producer in the region, where hog numbers dropped from 21.6 million on January 1, 1976, to a reported 16.8 million on January 1, 1977. Although the Polish Government has been promoting expansion of swine numbers on state farms, an increase in the socialized sector was more than offset by reductions in the private sector. Bulgaria and the GDR also registered declines in hog numbers.

Total cattle numbers, on the other hand, were nearly maintained during 1976. Inventories were an estimated 38 million head as of January 1, 1977, compared with 38.3 million a year earlier. Increases in Bulgaria, Czechoslovakia, Romania, and Yugoslavia were offset by declines in the GDR, Hungary, and Poland. Sheep numbers in the region increased slightly. It appears that expansion of poultry numbers continued during 1976, increasing about 5 percent.

All of the East European countries plan to rebuild livestock numbers during 1977, particularly hogs and cattle. The Polish Government, in an effort to boost the livestock economy and satisfy the market demand for meat, raised purchase prices paid to farmers last July. The price of fattened meat hogs, cattle for butchering, breeding stock, and poultry increased an average 19 to 24 percent. To encourage an increase in the number of pigs, the purchase price for delivery of pigs and piglets was raised 25-27 percent in August. As a result of the shortage of pork in Yugoslavia last summer and because of the country's efforts to rebuild hog inventories to early 1975 levels, the Government increased the purchase price to hog producers by 15 percent last October. While these price increases may improve future meat production capabilities, they are expected to result in additional belt tightening during 1977 as far as meat consumers are concerned, since farmers are likely to withhold some animals for additional fattening and rebuild livestock inventories.

#### **Meat Production Off in 1976**

Total meat production in Eastern Europe declined slightly in 1976 to an estimated 10.7 million tons (carcass weight), which compares with 10.9 million in 1975 (table 12). Pork production, which has accounted for about three-fifths of total meat production in recent years, dropped 6 percent, more than offsetting gains in poultry, beef and mutton production. Poultry meat output registered the largest gain during 1976, increasing about a tenth. Beef and veal output in the region remained near 1975 levels.

Romania and Bulgaria were the only East European countries with an increase in total meat production. Declines occurred in Czechoslovakia, the GDR, Hungary, Poland, and Yugoslavia.

Because of the expansion of the East European livestock sector in the early 1970's, exports of meat and meat products increased sharply during 1974 and 1975. In 1975, exports totaled nearly 900,000 tons, compared with about 650,000 in 1971.

During 1976, however, the drop in meat output greatly curbed exports from Hungary and Poland, the two leading exporting countries. Official data for January-November indicate total Hungarian exports of slaughter cattle, hogs, and sheep were down about 30 percent, and Poland's fresh meat exports were down nearly 50 percent, from the same period a year earlier. The improving market for baby beef, on the other hand, helped increase Yugoslavia's exports.

To earn hard-currency and maintain their established markets in the West, the East Euro-

pean countries increased their exports of processed meat products moderately, despite shortages at home. For example, Poland's total exports of canned hams during January-November 1976 increased 6 percent over the same period a year earlier.

The United States imported nearly 65,000 tons of meat and meat products from Eastern Europe during 1976, one-tenth more than in 1975. Poland accounted for nearly 60 percent of this 1976 total, with a quantity at the level of 1975, when it had a 65 percent share. Because of higher prices, the value of U.S. imports of meat and meat products from Eastern Europe increased 26 percent during 1976 to \$206 million.

While fresh and frozen meat exports from Eastern Europe were curbed during 1976, imports appeared to have increased to help fill in the gaps of domestic meat production. Official data are not currently available, but Poland appears to have increased its beef import volume during 1976. Last summer, Yugoslavia allowed imports of pork and poultry meat from Romania to help meet domestic requirements.

In anticipation of meat shortages in 1977, Poland emerged as a buyer of substantial quantities of red meat from Western suppliers. By early January 1977, Poland's red meat purchases amounted to 54,000 tons of boneless beef. These purchases were primarily from Australia, New Zealand, and Argentina for delivery in the first half of 1977. Polish sources indicate Poland may import about 100,000 tons of meat in 1977. Other countries in the region are reportedly interested in buying a total of 30,000 to 60,000 tons of Australian beef.

Despite imports of meat in 1977, total meat supplies in Eastern Europe are not likely to increase significantly during the year.

#### **Slight Increase in Dairy and Egg Output**

Milk production in 1976, at an estimated 42 million tons, was up 2 percent from 1975. At a time when dairy cow numbers declined, the increased output was due to improved production per cow. Poland, the largest East European producer, increased milk output by nearly 4 percent. Production in Hungary and Romania also increased.

In 1976, Hungary continued its ambitious program to upgrade the performance of its dairy herd by importing breeding stock, largely Holstein-Friesian heifers. The program was initiated in 1972, and during 1972-75, Hungary imported 20,573 breeding stock, of which the United States supplied about 60 percent. There was an important change in 1976, when the bulk of Hol-



stein-Friesians came from Western Europe. Hungary was able to buy Holstein cows in Europe at about 60 percent of the price of U.S. cows. While producing less milk than U.S. cows, these European Holsteins could still improve the Hungarian dairy herd. The poor grain crop and forage situation in Western Europe was chiefly responsible

for the lower prices, as well as Government subsidies to export unneeded animals.

Egg production in Eastern Europe rose slightly during 1976. Increases in Bulgaria, Romania, and Yugoslavia offset declines in Czechoslovakia, the GDR, Hungary, and Poland. (*Andrew A. Duymovic*)

## SATISFYING CONSUMER DEMAND FOR FOOD A MAJOR CONCERN

Eastern Europe's policy of stimulating increases in disposable personal income and stabilizing the retail prices for staple food such as meats, flours, and sugar, despite rising costs of production, has resulted in disequilibrium between supply and demand of those products. Higher income, fixed prices, and supply difficulties caused by drought have led to sporadic shortages in the markets in meats, sugar, vegetables, and fruit, particularly in Czechoslovakia and Poland. Consequently, the respective Governments have been forced to channel more funds into imports and into subsidizing the artificially low retail prices.

Per capita real income growth was faster than planned in every country of the region except Yugoslavia during 1971-75. Because of the close relationship between income and demand for meat, per capita consumption of meat increased simultaneously with disposable income (table 5). Between 1970 and 1975, consumption increased the most in Romania, by 20 kilograms, followed by 17 kilograms in Poland. Both income and consumption growth slowed down somewhat in 1976.

Poland has had the most serious difficulty in satisfying demand for meat, because in the past 3 years, agricultural output has been below trend and livestock inventories have declined steeply. In 1976, in trying to satisfy demand, the Polish Government stepped up meat imports and reduced meat exports. To dampen demand, the Government attempted to raise some prices, but it ran into serious resistance and withdrew the proposed increases. The price increases proposed by the Polish Government ranged between 30 percent for poultry and 100 percent for pork. The meat price increases would have averaged 69 percent.

The vacillation of the Polish Government in formulating a firm retail price policy in 1976 resulted in hoarding of nonperishable foods—particularly processed meats, sugar, and flour. The situation improved after the rationing of sugar and the appointment of five economic advisory

committees with 1-year terms. One of the committees has been delegated to make recommendations on a retail price policy. This action provided evidence that decisions on prices had been postponed for at least for 1 year. The Polish Government's remedial actions, besides stepping up meat imports and reducing exports, included permitting free market prices of meat to exceed fixed official prices by 40 percent. Another remedial measure, mentioned above, was to increase livestock producer prices in July to stimulate production in 1977.

Hungary, Romania, and Yugoslavia also raised retail prices and diverted meat from the export to the domestic market. Romania succeeded in increasing the market supply of meats by 17 percent and of processed meats, by 22 percent. The price increases in Hungary, while substantial, were less steep than those proposed in Poland and the Hungarian population was warned more than half a year in advance. The following retail price increases became effective in Hungary in July 1976: veal, 59 percent; beef, 41 percent; pork, 40 percent; poultry, 22 percent; and processed meats, 26 percent.

After the price increases in Hungary, sales increased for cheaper cuts of meats, processed meats, and poultry, while demand declined for pork. Per capita poultry consumption reached about 16 kilograms, the highest in Europe. The price increases are estimated to have reversed meat consumption from a 5-percent gain in the first half of the year, to a 4-percent decline in the second half. This measure helped Hungary reduce, considerably, the budget outlays for retail price subsidies. In Yugoslavia, despite previous price increases, a serious meat shortage developed, which had been foreshadowed by the reduced livestock inventory at the beginning of 1976.

Retail price increases in Hungary and the attempted increases in Poland made the Czechoslovak consumers jittery and food hoarding began there also. The drought and dim harvest outlook added to the concern which existed

Table 5--Growth in per capita income and meat consumption, Eastern Europe, 1970, 1975, and 1980 plans

[illegible]

( ) = Estimates.

NA = Not available.

1/ 1975/70.

2/ Gross income of population.

3/ 1980/75.

Source: Revista Economica #11, March 19, 1976.



among the Czechoslovakian population about their Government's ability to market adequate food.

After reassurances were given on price stability, the hoarding abated, both in Czechoslovakia and Poland, and the population got used to the sporadic shortages of certain types or cuts of meat.

In the GDR, market supplies of livestock products, with the exception of poultry, also dropped, according to data available for the first 9 months of 1976. The decline in meat supplies was 2 percent, with a 3-percent drop in pork being offset by an 11-percent increase in poultry.

In the northern countries and Hungary, the drought reduced potato, vegetable, and fruit supplies. Free market prices of these products rose significantly. Prices of fruits and vegetables also increased in Government outlets. But the Polish Government decreed that free market prices cannot be higher than Government list prices.

In Czechoslovakia, individual potato purchasing has been limited to 50 kilograms since October. Potatoes are in short supply, not only in Czechoslovakia, but in all neighboring countries,

which has made it difficult to improve supply through imports. Hungary announced a 17-percent price increase, effective January 1977, on canned fruit and vegetables and a 26-percent increase on frozen fruits and vegetables. Fresh potato and vegetable prices have been up by 25 to 30 percent.

The GDR is trying to improve its food distribution system through permitting the opening of private shops. After the steady decline in private ownership for 10 years, small butcher shops, bakeries, and so forth, reappeared in 1976.

Even in the countries where official food price indexes are stable, the actual cost of all food consumed increased in 1976. The indexes do not include free market prices, and higher prices of new products are not included among the items making up the index.

In the northern countries and Hungary, as an aftermath of the harvest shortfall, 1977 per capita meat consumption may stagnate at the 1976 level, or even decline; and vegetable and fruit supplies are not expected to improve until new crops appear on the market. In the southern countries, food supplies in 1977 are expected to increase. (*Thomas A. Vankai*)

## TRADE DEFICITS REMAIN LARGE

### Mounting External Debts

The leading question of 1976 with regard to total East European trade was the level of debt accumulated through Western financing of their purchases of goods and licenses. Estimates varied, but the cumulative hard currency debt was at least \$27 billion for these nations (including Yugoslavia) at the end of 1976, compared with at least \$21 billion at the end of 1975. Poland and the GDR accumulated the largest debts. Borrowing arrangements vary by country, but include supplier's credits, project credits from commercial banks which include buy-back provisions, and straight financial loans.

The external debt situation evoked a number of concerns in the West. At one extreme, some analysts still saw very good opportunities for using idle Western capital and an increasing, permanent linking of the CEMA economies to world trade. On the other hand, some felt that further extension of credit to the CEMA countries would leave the West open to the threat of default.

Western financial circles have tended to regard the Soviet Union, because of its great raw material and energy reserves, as the ultimate guarantor

of East European debt. The mounting debt, however, has caused most observers to believe that a more careful application of normal economic criteria in extending loans and credits is necessary. Western banks have begun to differentiate among the countries according to their credit worthiness. Thus, a potential creditor's assessment of the East European country's request would first consider the ratio between annual export earnings and the amount of principal and interest due.

### Decreased Deficit in Total Trade

With data available from all countries except the GDR, it appears that the region's total trade deficit was about \$7 billion in 1976, compared with \$8.2 billion in 1975. Bulgaria reduced its trade deficit by 72 percent and Hungary by 35 percent. Yugoslavia cut its trade deficit by \$1.2 billion. Romania achieved a small surplus. In contrast, Czechoslovakia and Poland each increased their deficits by about 25 percent. Eastern Europe's total hard-currency trade deficit in 1975 was estimated by Western sources at about \$5.7 billion. In 1976, all countries except Czechoslovakia and Poland improved their trade bal-

ance with market countries, mostly because of substantially improved balances with West Germany.

### Agricultural Trade Deficits

Despite the overall improvement in the trade balance, there are indications that Eastern Europe's deficit in agricultural trade increased as grain and oilseed meal imports reached record levels in the northern countries and exports of grain from the southern countries fell off. At the same time, increased meat exports by the southern countries were offset by increased Polish imports and curtailed exports of Polish meat and Hungarian poultry meat. Full data on agricultural trade are not available yet.

Record sales of U.S. grain in 1976 brought total U.S. agricultural exports to Eastern Europe, adjusted for transshipments, to a record \$1.3 billion. Of this, \$887 million was in grains and \$218 million was in soybean meal (table 14). During 1975-76 the value of transshipments through West European ports increased as a percentage of total U.S. sales to Eastern Europe, a situation reflecting some weakness in CEMA maritime facilities. In 1976, transshipments were valued at about \$387 million.

CCC credit sales to Eastern Europe were at an alltime high in 1976, increasing to about \$158 million, more than twice the previous high in 1972. All CCC credit sales in 1976 were granted to Poland and Romania, with Poland's share being 75 percent. Grain accounted for 57 percent of the CCC sales, and soybeans and soybean products, for 32 percent.

U.S. agricultural imports from Eastern Europe totaled \$275 million (table 15). Eastern Europe's agricultural trade balance with the United States deteriorated by 28 percent compared with that of 1975, despite better terms of trade for East Europe.

In 1976, unit prices for several U.S. agricultural exports to Eastern Europe were less favorable than in 1975. Soybean meal unit prices were up by about 6 percent, but wheat prices declined by 12 percent, corn by 11 percent, and sorghum by 4 percent. In comparison, unit prices for meat and tobacco, the chief U.S. imports from the region, increased by about 14 and 28 percent, respectively. Large volume increases more than compensated for the decline in U.S. terms of trade. The volume of grain sales increased by 53 percent and soybean meal by 17 percent. On the other hand, the volume of meat and tobacco imports from Eastern Europe rose much less than did the unit prices. (*Miles J. Lambert*)

## AMBITIOUS AGRICULTURAL PLANS FOR 1976-80

Agricultural growth plans for 1976-80 vary from 2.7 percent in Czechoslovakia to 5-5.5 percent in Romania. Planned growth rates are somewhat slower than achieved between 1966-70 and 1971-75 in Hungary and Poland, the same in Czechoslovakia, and faster in the other four countries (table 6).

With the probable exception of Bulgaria and Romania, which have not published sectoral growth plans, the crop sector is slated to grow faster than the livestock sector in Eastern Europe. This is a policy change caused by the difficulty in exporting meat to the European Community and by the inability or unwillingness of the USSR to continue to sell grains to Eastern Europe on a regular basis. Soviet grain exports to the GDR and Poland have been resumed, however, during 1976/77, facilitated by the record Soviet grain harvest and compelled by the precarious hard-currency shortage in those countries.

Each East European country is striving for early self-sufficiency in temperate-zone food products, but in some countries, the 1976 drought

caused temporary setbacks. Among the grain deficit countries of Czechoslovakia, GDR, and Poland, only Czechoslovakia would appear to have a chance to achieve grain self-sufficiency in this decade. The two other countries are likely to just manage to reduce the size of imports. Under normal weather conditions, the four Southern countries will expand their grain exports. However, none of the countries will produce adequate protein feed to satisfy their growing mixed feed industry. At present, protein has a less-than-optimal share in the feed rations; consequently, imports of protein-rich feeds may grow even if domestic production increases. Czechoslovakia is the only net importer of meats, being 95 percent self-sufficient. It will likely remain in this position if per capita meat consumption increases as planned.

According to the plans, annual average grain production in Eastern Europe should be between 106 and 110 million tons during 1976-80. This compares with 87 million tons during 1971-75 and with over 93 million tons in 1976—the first year



Table 6--Average annual growth rates in gross agricultural production, Eastern Europe, 1971-75, 1976, and plans for 1977 and 1976-80

Country	: 1966-70 : to : 1971-75	: 1975 : to : 1976	: 1976 : to : 1977	: 1971-75 : to : 1976-80
			<u>Percent</u>	
Bulgaria .....	3.1	3.1	4	3.7
Czechoslovakia .....	2.7	-2.7	8.2	2.7
GDR .....	2.1	-9.8	2.8	3.4
Hungary .....	3.4	-3	7-8	3.2
Poland .....	3.7	-0.8	5.3	3-3.5
Romania .....	4.6	17.2	10.9-13.6	5-5.5
Yugoslavia .....	3.2	8	4	3.9

of the new plan period. Output of oilseed products is planned to average 4 million tons a year, compared with the record 3.6 million tons in 1976. Sugarbeet production plans call for 60 million tons of output annually, compared with 40 million tons in 1971-75. The most moderate expansion plans for meat production are in Hungary—12 to 13 percent growth targeted—where per capita production level is the highest. In contrast, the most ambitious plan, calling for a 55 to 63 percent increase, is in Romania, where per capita consumption is one of the lowest in the region.

Each country is taking specific measures to fulfill its plans, as they are in various development stages and are endowed with different resource bases. Fertilizer use may increase by only 11 percent in the GDR, where the supply in 1976 was close to 400 kilograms per hectare of cultivated land. Romania, however, intends to triple its fertilizer use from an average of 76 kilograms during 1971-75. Land improvement, including irrigation and drainage, will continue in each of the countries. In Czechoslovakia and the GDR, where labor is in short supply, great emphasis will be put on mechanization to replace labor as well as improve productivity through timely cultivation and harvest, therefore reducing losses. Production specialization in enlarged units, particularly in the GDR, is being promoted to further efficiency. Hungary continues to increase the number of farms participating in uniform production systems, but at a slower pace than in previous years because of inadequate funds for the purchase of new machinery. Bulgaria is experimenting with reorganizational innovations and hopes that a centralized management in a

National Agri-Industrial Complex will lead to better resource allocation.

In addition to improving the productivity of land in all countries, new higher yielding and more pest- and disease-resistant crop varieties will be introduced. Livestock productivity will be improved through new breeds and cross-breeding. Labor productivity will be increased with the help of new technology.

In Poland and Yugoslavia, where private land ownership predominates, a slow shift toward socialization is continuing. Poland promotes voluntary cooperation of farmers by offering financial incentives, and the state is taking over land from elderly owners in exchange for pensions. In Yugoslavia, many individual farmers are contracting their products with the large "combinats"—horizontally and vertically integrated state farms—if they are in the vicinity. These, in turn, are providing various services, such as seeds, fertilizer, machinery, and marketing.

Producer price increases are also used as production incentives, particularly in Hungary, Poland, and Yugoslavia, where the profit motive is an important factor in managerial decisionmaking.

After the dismal harvest in 1976, it is not expected that the northern countries in the region will stage a complete recovery in 1977 back to the growth path set by the plans. It will take several years to replenish the livestock inventories and rebuild grain reserves. Estimated 1976 results and agricultural gross production growth plans for 1977 are given in table 6.

As a consequence of the production declines in the northern countries in 1976, together with the

relatively modest planned increases for inputs, some of the 1976-80 targets will be beyond reach. In Romania, past underfulfillments of plans make

it doubtful that the ambitious goals will be met during the present plan period. (Thomas A. Van-kai)

## APPENDIX

### *Press Release on the Understanding on Grain Trade Between the United States and Poland, November 17, 1975*

U.S. Secretary of Agriculture Earl L. Butz and Minister of Agriculture of Poland Kazimierz Barcikowski reached an understanding today on long-term objectives in grain trade between the United States and Poland. Secretary Butz and Minister Barcikowski said their understanding reaffirmed the principles set forth in the U.S.-Polish Joint Statement on Development of Agricultural Trade which was signed during the visit to the United States of First Secretary of the Central Committee of the Polish United Workers Party Edward Gierek in October 1974.

The understanding, expressed in an exchange of letters, grew out of earlier meetings between Secretary Butz and Minister Barcikowski during the Minister's September visit to the U.S. Further discussions on long-term grain purchases by Poland were held during the fifth session of the American-Polish Trade Commission which met in Warsaw October 6-8, 1975.

In his conversations with Secretary Butz, Minister Barcikowski stated Poland's intentions to buy 2.5 million metric tons of grain from the United States annually for at least the next five years, assuming that the quality offered and the delivery dates will be acceptable to the Polish side, and that the price level will not deviate from the world market prices. He said that actual purchases in any given year could fluctuate by as much as 20 percent from the 2.5 million metric ton figure. Minister Barcikowski also provided Secretary Butz with an estimated breakdown of the 2.5 million metric tons by commodity for the current marketing year.

Secretary Butz expressed his appreciation for the clear indication Minister Barcikowski had given American farmers regarding Poland's future import intentions.

The United States recognizes Poland as a traditional importer of U.S. agricultural products and values Poland as an agricultural market. Referring to the October 8, 1974 Joint Statement, the Secretary said that the United States reaffirms its full intention to meet Poland's present and future import demand, subject to sup-

ply availabilities. The Secretary said that the import plans now being provided by Poland, including Poland's expression of its intention to purchase 2.5 million metric tons of grain, annually from the United States are the best way to assure that supplies will be available for purchase from the United States. The Secretary also said that the United States recognizes Poland as a traditional and valuable CCC credit customer and will continue to accord appropriate consideration to Poland's future applications for CCC credit.

The Secretary and Minister noted that actual annual trade figures will be discussed in periodic consultations between officials of the appropriate Polish Government agencies and the U.S. Department of Agriculture. Secretary Butz and Minister Barcikowski both reaffirmed the interest of their countries in expanding agricultural trade and cooperation in accordance with the Joint Statement and stated their belief that the understanding they had reached will facilitate the stabilization and continued growth of agricultural trade between the United States and Poland.

### *Press Release on the Exchange of Views on Prospects for Trade in Grains Between the United States and the GDR, November 10, 1976*

#### **U.S.-German Democratic Republic Meet on Long-Term Agricultural Trade**

Washington, Nov. 10—Richard E. Bell, Assistant Secretary of Agriculture for International Affairs and Commodity Programs, and Dr. Gerhard Beil, State Secretary of the Ministry of Foreign Trade for the German Democratic Republic (GDR), met Nov. 9 to exchange views on prospects for the development of trade in grains and discussions of various aspects of the grain trading systems of the two countries.

During the discussions, State Secretary Beil said that in recent years GDR imports of grain from the United States have increased considerably. The GDR imports grain and feed primarily to maintain its large animal numbers and meat production.

Dr. Beil expressed an interest in continuing purchases of grain on the U.S. market and said



that the German Democratic Republic looks to the United States to supply a substantial share of its annual grain import needs. He said the GDR's annual requirements for U.S. grains are expected to be 1.5 million to 2.0 million metric tons of grain.

Assistant Secretary Bell expressed appreciation on behalf of the Department of Agriculture and America's farmers for the clear indication of the GDR's import requirements and said the U.S. fully expects to be able to meet the GDR's grain import requirements. Mr. Bell said that regular consultations will provide information on supply, demand and trade between the United States and the GDR, and will enable U.S. farmers to plan production with greater assurance that there will be sufficient demand for the commodities they produce.

Assistant Secretary Bell said the United States values the German Democratic Republic as an agricultural market. In fiscal year 1976, ending June 30, the German Democratic Republic bought about 2.5 million tons of U.S. grain. He noted that U.S. grain exports to the GDR have increased substantially in recent years, and that regular consultations in the future would facilitate a further expansion of this trade.

Dr. Beil was accompanied on his visit to USDA by Manfred Wolf, Director General of Nahrung-Export-Import, the GDR Foreign Trade Enterprise for Agricultural Products; Horst Ber-

gemann, Director of Grain Division, Nahrung-Export-Import; and by Dr. Fritz Schmied, Ministry of Foreign Trade. Ambassador-Professor Dr. Rolf Sieber and First Secretary Dieter Rothe of the Embassy of the German Democratic Republic in Washington also participated in the discussion with Assistant Secretary Bell.

In addition to Assistant Secretary Bell, U.S. delegation for the talks included John Ferch, director of Office of Food Policy, Department of State; Hazan Gale, Director, Office of Raw Materials and Ocean Policy, Department of Treasury; and, from the Department of Agriculture, Donald Novotny, Charles Pence, Roger Neetz, and Kenneth Murray.

Assistant Secretary Bell and State Secretary Beil both reaffirmed the interest of their countries in expanding agricultural trade and stated their belief that the informal understanding they had reached will facilitate the continuation and growth of agricultural trade between the United States and the GDR.

Dr. Beil and Mr. Bell agreed that such talks have been very useful and both sides indicated their intention to hold similar consultations in the future on a regular basis.

Dr. Beil's party met with Secretary of Agriculture John A. Knebel, and plans to visit farms in the Washington area and to make calls on senior officials of the U.S. Departments of Commerce and State.

-- = No information reported, negligible, or none.  
( ) = Estimates.

1/ 1976 data are preliminary.  
2/ Unspecified amount of sorghum included in corn.  
3/ Includes buckwheat, millet, spelt, mixed grains, and sorghum.

2/ Unspecified amount of sorghum included in corn.

3/ Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 8--Production of grains, Eastern Europe, annual 1971-76 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
1,000 metric tons								
Wheat								
1971 .....	3,095	3,878	2,490	3,915	5,456	5,595	5,604	30,033
1972 .....	3,582	4,017	2,744	4,089	5,174	6,041	4,843	30,490
1973 .....	3,258	4,646	2,861	4,498	5,807	5,487	4,750	31,307
1974 .....	2,911	5,059	3,154	4,968	6,409	4,999	6,282	33,782
1975 .....	2,771	4,202	2,736	4,005	5,207	4,862	4,404	28,187
1976 .....	3,110	4,800	2,900	5,138	5,740	6,729	5,980	34,397
Rye								
1971 .....	24	619	1,754	180	7,827	65	134	10,603
1972 .....	21	634	1,904	171	8,149	58	120	11,057
1973 .....	19	690	1,699	175	8,268	42	118	11,011
1974 .....	21	671	1,949	175	7,881	(50)	120	10,867
1975 .....	18	530	1,563	147	6,270	(50)	98	8,676
1976 .....	20	800	1,500	156	6,914	(50)	105	9,545
Barley								
1971 .....	1,253	2,851	2,286	782	2,450	789	464	10,875
1972 .....	1,427	2,651	2,592	802	2,750	838	487	11,547
1973 .....	1,368	2,962	2,848	871	3,158	730	676	12,613
1974 .....	1,636	3,375	3,422	894	3,908	916	794	14,945
1975 .....	1,699	3,114	3,682	699	3,638	952	703	14,487
1976 .....	1,800	2,740	2,700	750	3,609	1,220	653	13,472
Oats								
1971 .....	102	902	807	85	3,195	161	312	5,564
1972 .....	75	726	890	60	3,212	111	260	5,334
1973 .....	51	740	805	67	3,220	102	298	5,283
1974 .....	67	687	922	78	3,244	91	353	5,442
1975 .....	56	591	780	87	2,920	57	368	4,859
1976 .....	60	400	670	86	2,696	48	320	4,280
Corn								
1971 .....	2,518	524	9	4,674	13	7,850	9,443	23,031
1972 .....	2,974	642	27	5,537	10	9,817	7,930	26,937
1973 .....	2,586	619	13	5,911	13	7,397	8,253	24,792
1974 .....	1,627	574	3	6,195	19	7,440	8,031	23,889
1975 .....	2,822	843	2	7,088	79	9,241	9,389	29,364
1976 .....	3,000	580	2	5,184	220	2/11,707	9,112	29,805
Rice								
1971 .....	67	--	--	67	--	66	36	236
1972 .....	47	--	--	61	--	45	31	184
1973 .....	62	--	--	69	--	50	32	213
1974 .....	60	--	--	56	--	53	31	200
1975 .....	70	--	--	69	--	68	37	244
1976 .....	70	--	--	34	--	65	28	197
Other coarse grains 3/								
1971 .....	1	--	394	--	929	2	18	1,344
1972 .....	1	--	379	--	1,140	3	15	1,538
1973 .....	80	--	276	--	1,392	3	15	1,766
1974 .....	--	--	254	24	1,516	2	13	1,809
1975 .....	--	--	148	13	1,443	36	11	1,651
1976 .....	--	--	230	45	1,658	2/	10	1,943
Total grain								
1971 .....	7,060	8,774	7,740	9,703	19,870	14,528	14,011	81,686
1972 .....	8,127	8,670	8,536	10,720	20,435	16,913	13,686	87,087
1973 .....	7,403	9,657	8,503	11,591	21,858	13,811	14,142	86,965
1974 .....	6,322	10,366	9,704	12,390	22,977	13,551	15,624	90,934
1975 .....	7,436	9,280	8,911	12,108	19,557	15,266	15,010	87,568
1976 .....	8,060	9,320	8,002	11,393	20,837	19,819	16,208	93,639

-- = No information reported, negligible, or none.

( ) = Estimates.

1/ 1976 data are preliminary.

2/ Unspecified amount of sorghum included in corn.

3/ Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 9--Area of selected crops, Eastern Europe, annual 1971-76 1/

Commodity and year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
Potatoes								
1971 .....	29	332	658	129	2,669	290	326	4,433
1972 .....	30	322	646	118	2,656	296	315	4,383
1973 .....	27	305	650	106	2,678	284	317	4,367
1974 .....	31	280	635	108	2,684	295	321	4,354
1975 .....	30	251	574	100	2,581	289	314	4,139
1976 .....	30	240	566	90	2,466	243	305	3,945
Sugarbeets								
1971 .....	44	185	211	73	421	178	85	1,197
1972 .....	55	187	222	79	438	197	79	1,257
1973 .....	60	197	229	92	445	234	86	1,343
1974 .....	61	205	234	98	440	218	104	1,360
1975 .....	78	217	266	127	496	247	108	1,539
1976 .....	70	214	270	129	550	236	107	1,576
Sunflowerseed								
1971 .....	267	3	--	118	--	548	183	1,119
1972 .....	274	4	--	108	--	554	171	1,111
1973 .....	252	4	--	103	--	512	224	1,095
1974 .....	262	3	--	113	--	509	201	1,088
1975 .....	238	4	--	129	--	511	194	1,076
1976 .....	255	6	--	135	--	500	174	1,070
Rapeseed								
1971 .....	--	52	104	44	362	--	9	571
1972 .....	--	53	111	50	276	--	9	499
1973 .....	--	57	122	50	315	--	5	549
1974 .....	--	45	123	33	258	13	5	477
1975 .....	--	63	132	46	309	13	7	570
1976 .....	--	63	128	50	398	12	11	662
Soybeans								
1971 .....	18	--	--	--	--	147	5	170
1972 .....	14	--	--	--	--	109	4	127
1973 .....	19	--	--	--	--	183	9	211
1974 .....	2/28	--	--	14	--	238	9	289
1975 .....	2/37	--	--	25	--	121	14	197
1976 .....	53	--	--	36	--	125	32	246
Tobacco								
1971 .....	115	4	3	14	42	33	49	260
1972 .....	122	4	3	15	46	39	57	286
1973 .....	119	4	3	17	48	52	57	300
1974 .....	123	4	3	17	52	53	57	309
1975 .....	127	4	3	16	50	57	61	318
1976 .....	128	4	3	11	59	60	69	334

-- = No information reported, negligible, or none.

1/ 1976 data are preliminary.

2/ Derived figures.



Table 10--Production of selected crops, Eastern Europe, annual 1971-76 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
					1,000 metric tons			
Potatoes								
1971	404	4,621	9,411	1,488	39,801	3,783	2,952	62,460
1972	382	5,058	12,140	1,310	48,735	3,672	2,406	73,703
1973	328	5,087	11,401	1,163	51,928	2,644	2,974	75,525
1974	345	4,522	13,404	1,364	48,519	4,119	3,127	75,400
1975	318	3,565	7,673	1,268	46,429	2,716	2,394	64,363
1976	350	4,030	6,400	1,060	50,012	4,200	2,690	68,742
Sugarbeets								
1971	1,516	5,832	5,128	2,023	12,557	3,975	2,961	33,992
1972	1,951	6,884	7,223	2,908	14,341	5,581	3,274	42,162
1973	1,719	6,163	6,682	2,752	13,664	4,380	3,338	38,698
1974	1,611	8,219	6,959	3,707	12,971	4,947	4,300	42,714
1975	1,758	7,734	6,414	4,089	15,707	4,905	4,213	44,820
1976	2,280	5,600	4,860	3,923	16,258	7,000	4,707	44,628
Sunflowerseed								
1971	462	5	--	149	--	791	347	1,754
1972	494	6	--	132	--	850	277	1,759
1973	448	7	--	152	--	756	434	1,797
1974	368	4	--	120	--	681	298	1,471
1975	426	5	--	154	--	728	272	1,585
1976	355	7	--	165	--	806	324	1,657
Rapeseed								
1971	--	101	197	71	595	--	18	982
1972	--	107	234	52	430	--	14	837
1973	--	117	246	68	512	--	8	951
1974	--	94	298	45	523	16	12	988
1975	--	131	363	65	726	17	14	1,316
1976	--	131	310	61	983	18	23	1,526
Soybeans								
1971	2/12	--	--	--	--	165	4	181
1972	2/12	--	--	--	--	186	6	204
1973	2/30	--	--	--	--	244	13	287
1974	2/32	--	--	15	--	298	14	359
1975	2/80	--	--	41	--	213	30	364
1976	100	--	--	55	--	225	45	425
Tobacco								
1971	120	6	4	16	70	30	44	290
1972	158	4	5	17	75	38	62	359
1973	142	5	6	20	78	38	65	354
1974	145	6	5	17	65	39	59	336
1975	162	6	5	17	102	40	70	402
1976	165	5	5	16	100	63	74	428

-- = No information reported, negligible, or none.

1/ 1976 data are preliminary.

2/ Derived figure.

Table 11--January livestock numbers, Eastern Europe, 1971-77 1/

Category and year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
					1,000 head			
Cattle, total								
1971	1,279	4,288	5,190	1,912	10,220	5,216	5,138	33,243
1972	1,379	4,349	5,293	1,883	10,562	5,528	5,148	34,142
1973	1,441	4,466	5,379	1,893	11,265	5,767	5,366	35,577
1974	1,454	4,556	5,482	1,931	12,309	5,897	5,681	37,310
1975	1,554	4,566	5,585	2,018	12,815	5,983	5,872	38,393
1976	1,657	4,555	5,532	1,904	12,764	6,126	5,755	38,293
1977	1,722	4,654	5,470	1,888	12,045	6,349	5,830	37,958
Cows								
1971	589	1,881	2,163	763	5,829	2,276	2,774	16,275
1972	607	1,900	2,173	750	5,904	2,385	2,786	16,505
1973	620	1,906	2,169	762	6,023	2,447	2,921	16,848
1974	615	1,927	2,164	786	6,268	2,498	3,056	17,314
1975	644	1,927	2,157	797	6,350	2,537	3,195	17,607
1976	669	1,903	2,155	760	6,138	2,560	3,267	17,452
1977	691	1,885	2,146	770	5,783	2,568	3,300	17,143
Hogs								
1971	2,369	5,530	9,684	7,311	13,863	6,359	6,562	51,678
1972	2,806	5,935	9,995	7,594	16,946	7,742	6,216	57,234
1973	2,598	6,093	10,361	6,858	19,023	8,785	6,342	60,060
1974	2,431	6,266	10,849	8,011	21,451	8,987	7,401	65,396
1975	3,422	6,719	11,518	8,293	21,709	8,566	7,683	67,910
1976	3,889	6,683	11,501	6,953	21,647	8,813	6,536	66,022
1977	3,453	6,820	11,291	7,855	16,764	10,192	6,863	63,238
Sheep								
1971	9,678	981	1,598	2,316	2,661	13,818	8,703	39,755
1972	10,127	932	1,607	2,054	2,653	14,071	8,326	39,770
1973	9,920	889	1,657	1,936	2,627	14,455	7,774	39,258
1974	9,765	842	1,742	1,813	2,595	14,302	7,852	38,911
1975	9,791	811	1,847	2,021	2,660	13,929	8,175	39,234
1976	10,014	805	1,882	2,039	2,787	13,865	7,831	39,223
1977	9,725	790	1,870	2,348	2,800	14,327	7,780	39,640
Horses								
1971	170	131	126	222	2,569	668	1,048	4,934
1972	159	118	106	211	2,469	654	1,015	4,732
1973	148	100	94	188	2,401	631	964	4,526
1974	142	84	82	172	2,387	594	945	4,406
1975	137	71	76	163	2,330	557	922	4,256
1976	133	62	70	156	2,100	562	864	3,947
1977	130	60	70	150	2,050	560	820	3,840
Poultry								
1971	33,706	39,187	43,034	61,300	87,561	54,333	44,954	364,075
1972	34,102	38,238	43,343	58,800	88,854	61,262	44,584	369,183
1973	34,788	39,170	43,658	50,600	92,875	64,496	49,206	374,793
1974	36,939	41,232	45,667	55,300	94,227	66,511	54,685	394,561
1975	35,089	39,476	47,530	57,500	96,583	67,672	54,991	39

1/ 1977 data are preliminary.





Table 13--Trade in selected agricultural

Commodity and country	Imports							
	1968	1969	1970	1971	1972	1973	1974	1975
	<u>1,000 metric tons</u>							
Total grain:								
Bulgaria	365	508	158	195	--	136	637	653
Czechoslovakia	1,879	1,727	1,367	2,033	1,550	1,552	1,088	885
GDR	1,628	1,864	3,424	3,066	3,845	2,990	2,770	3,360
Hungary	455	356	181	808	788	265	390	172
Poland	1,972	1,875	2,484	2,904	3,108	3,263	4,091	3,963
Romania 1/	--	--	484	366	39	212	784	518
Yugoslavia	79	52	125	1,006	982	278	940	17
Total	6,378	6,382	8,223	10,378	10,312	8,696	10,700	9,568
Wheat:								
Bulgaria	273	401	52	150	--	--	77	105
Czechoslovakia	1,371	1,226	1,026	1,204	1,094	950	664	515
GDR	1,075	1,311	2,084	1,867	2,040	1,594	1,219	1,130
Hungary	307	301	156	401	35	--	2	30
Poland	1,068	1,181	1,099	1,910	1,274	1,620	1,758	1,477
Romania 1/	--	--	152	334	29	184	302	86
Yugoslavia	79	--	--	547	448	225	845	--
Total	4,173	4,420	4,569	6,413	4,920	4,573	4,867	3,343
Barley:								
Bulgaria	54	22	106	8	--	53	201	278
Czechoslovakia	125	197	139	133	112	133	90	82
GDR	170	218	799	187	675	298	104	390
Hungary	74	45	23	209	548	199	333	101
Poland	545	375	1,093	616	1,332	780	1,135	1,376
Romania 1/	--	--	332	32	--	7	21	--
Yugoslavia	--	34	115	125	66	10	5	15
Total	968	891	2,607	1,310	2,733	1,480	1,889	2,242
Corn:								
Bulgaria	39	83	--	33	--	68	359	222
Czechoslovakia	263	217	122	480	302	469	332	283
GDR	378	289	376	656	1,031	1,086	1,328	1,795
Hungary	74	--	--	162	107	--	3	--
Poland	295	247	231	267	337	684	765	634
Romania 1/	--	--	--	--	10	10	461	432
Yugoslavia	--	7	1	308	417	42	81	--
Total	1,049	843	730	1,906	2,204	2,359	3,329	3,366
Oilseeds:								
Bulgaria	31	41	21	6	5	2	5	3
Czechoslovakia	209	181	188	132	120	140	129	114
GDR	132	130	203	208	197	133	129	124
Hungary	23	75	38	64	6	5	5	2
Poland	52	132	82	88	108	163	206	134
Romania 3/	--	--	--	20	19	20	20	15
Yugoslavia	31	15	4	51	9	12	46	12
Total	478	574	536	569	464	475	540	404

Footnotes at end of table.

Exports									Commodity and country
1968	1969	1970	1971	1972	1973	1974	1975		
1,000 metric tons									
489	536	462	558	833	367	149	195		Total grain:
27	54	62	35	35	33	207	73		Bulgaria
290	231	420	390	325	343	312	410		Czechoslovakia
141	460	810	112	505	1,732	1,472	1,285		GDR 1/
119	183	200	111	208	410	262	104		Hungary
1,555	1,368	371	702	900	1,126	712	1,163		Poland
433	323	304	70	22	398	315	36		Romania
3,054	3,155	2,629	1,978	2,828	4,409	3,429	3,266		Yugoslavia
									Total
									Wheat:
365	238	211	324	509	220	139	113		Bulgaria
--	14	--	--	--	--	--	--		Czechoslovakia
23	--	143	160	--	--	68	73		GDR 1/
115	367	571	83	363	923	633	952		Hungary
--	--	--	--	--	--	--	--		Poland
1,176	480	14	236	543	776	641	705		Romania
3	--	4	2	--	--	4	--		Yugoslavia
1,682	1,099	943	805	1,415	1,919	1,485	1,843		Total
									Barley:
--	--	--	--	40	16	--	--		Bulgaria
27	40	54	33	35	33	33	48		Czechoslovakia
95	102	210	164	167	173	152	62		GDR 1/
--	1	19	--	122	88	14	--		Hungary 2/
32	51	144	78	129	43	68	29		Poland
--	--	--	--	--	--	--	--		Romania
21	1	--	1	--	103	33	11		Yugoslavia
175	195	427	276	493	456	300	150		Total
									Corn:
124	298	250	230	285	130	10	82		Bulgaria
--	--	--	--	--	--	--	--		Czechoslovakia
--	--	--	--	--	--	--	--		GDR
--	79	180	26	19	693	770	319		Hungary
--	--	--	--	--	--	--	--		Poland
375	888	357	466	357	350	71	458		Romania
389	318	298	63	20	277	263	20		Yugoslavia
888	1,583	1,085	785	681	1,450	1,114	879		Total
									Oilseeds:
50	134	117	95	95	35	2	7		Bulgaria
2	4	3	3	2	3	2	1		Czechoslovakia
--	--	--	--	--	--	--	--		GDR
18	36	42	80	36	27	30	45		Hungary
175	85	46	61	10	57	3	76		Poland
75	49	54	25	78	42	29	--		Romania 2/
25	23	135	33	20	15	30	6		Yugoslavia
345	331	397	297	241	179	96	135		Total

--Continued



Table 13--Trade in selected agricultural

Commodity and country	Imports							
	1968	1969	1970	1971	1972	1973	1974	1975
	<u>1,000 metric tons</u>							
Vegetable oil, edible:								
Bulgaria	25	19	5	1	--	--	--	2
Czechoslovakia	47	50	50	55	58	40	46	49
GDR	112	104	117	99	161	98	127	95
Hungary	29	28	12	30	7	21	20	17
Poland	47	41	42	65	69	66	68	61
Romania	5	8	7	1	1	1	5	7
Yugoslavia	47	10	36	134	128	48	59	130
Total	312	260	269	385	424	274	325	361
Oilseed meal <u>4/</u> :								
Bulgaria	53	81	91	137	179	170	302	218
Czechoslovakia	342	455	428	365	501	630	591	652
GDR	379	456	522	637	834	769	829	875
Hungary	270	260	341	401	377	380	580	505
Poland	299	278	313	317	545	724	794	948
Romania <u>2/</u>	41	30	41	51	117	215	227	200
Yugoslavia	122	139	196	188	150	200	272	150
Total	1,506	1,699	1,932	2,096	2,703	3,088	3,595	3,548
Cotton:								
Bulgaria	58	62	61	62	56	61	58	51
Czechoslovakia	107	82	114	106	108	104	119	116
GDR	87	79	106	91	91	86	99	100
Hungary	75	64	98	66	67	73	74	93
Poland	156	132	150	145	157	145	152	160
Romania	76	84	83	91	97	108	104	111
Yugoslavia	72	111	70	79	86	94	109	85
Total	631	614	682	640	662	671	715	716
Hides, cattle <u>5/</u> :								
Bulgaria	690	570	465	486	384	366	443	377
Czechoslovakia	2,050	1,800	2,141	2,443	2,451	2,452	2,122	2,147
GDR <u>6/</u>	--	--	1,764	1,775	1,841	2,557	1,532	1,565
Hungary	1,653	1,200	1,635	1,063	1,476	1,716	1,852	1,648
Poland <u>6/</u>	4,541	3,869	4,630	4,960	5,842	6,724	5,677	5,181
Romania	1,153	1,470	2,663	1,675	2,335	3,244	1,769	1,761
Yugoslavia <u>6/</u>	2,370	2,227	4,001	2,249	2,568	2,260	2,557	2,425
Total	12,457	11,136	17,299	14,651	16,897	19,319	15,952	15,104
Meat and meat products <u>7/</u> :								
Bulgaria	14	11	16	15	10	15	39	19
Czechoslovakia	83	110	121	76	46	22	41	32
GDR	68	66	85	56	47	43	25	24
Hungary	24	27	61	16	14	27	19	12
Poland	79	36	44	153	65	55	6	16
Romania	6	5	8	46	43	8	10	3
Yugoslavia	6	2	14	5	11	46	20	8
Total	280	257	349	367	236	216	160	114

Footnotes at end of table.

commodities, Eastern Europe, 1968-75--Continued

Exports								Commodity and country
1968	1969	1970	1971	1972	1973	1974	1975	
1,000 metric tons								
								:Vegetable oil,
								: edible:
46	60	47	20	26	19	23	21	: Bulgaria
6	3	--	8	1	1	1	1	: Czechoslovakia
--	--	--	--	--	--	--	--	: GDR
42	56	30	44	41	41	39	38	: Hungary
55	35	38	17	62	47	47	57	: Poland
116	144	119	132	129	142	165	141	: Romania
11	--	4	6	1	3	7	--	: Yugoslavia
276	298	238	227	260	253	282	258	: Total
								:
								:Oilseed meal 4/:
--	--	7	36	40	42	--	--	: Bulgaria
--	--	13	14	29	27	27	35	: Czechoslovakia
--	--	--	--	--	--	--	--	: GDR
--	--	41	98	60	117	171	163	: Hungary
--	--	16	30	14	--	6	4	: Poland
--	--	--	--	--	--	--	--	: Romania
13	31	52	8	9	--	--	--	: Yugoslavia
13	31	129	186	152	186	204	202	: Total
								:
								:Cotton:
16	11	12	9	10	6	2	1	: Bulgaria
4	--	--	16	--	--	--	--	: Czechoslovakia
--	--	--	--	--	--	--	--	: GDR
--	--	--	--	--	--	--	--	: Hungary
--	--	--	--	--	--	--	4	: Poland
--	--	--	--	--	--	--	--	: Romania
--	--	--	--	--	--	--	--	: Yugoslavia
20	11	12	25	10	6	2	5	: Total
								:
								:Hides, cattle 5/:
--	--	44	137	2	--	--	--	: Bulgaria
--	--	--	--	--	--	--	--	: Czechoslovakia
--	--	--	--	--	--	--	--	: GDR
--	--	--	--	--	--	--	--	: Hungary
165	253	298	330	330	220	220	308	: Poland 6/
--	--	--	--	--	--	--	--	: Romania
--	--	--	--	--	--	--	--	: Yugoslavia
165	253	342	467	332	220	220	308	: Total
								:
								:Meat and meat
								: products 7/:
84	74	65	67	74	65	61	99	: Bulgaria
31	37	19	30	25	50	9	16	: Czechoslovakia
47	54	54	60	71	68	39	69	: GDR 2/3/
120	107	123	162	163	134	201	249	: Hungary
176	176	157	174	173	194	234	209	: Poland
92	80	55	55	69	100	133	165	: Romania
118	112	99	102	108	91	57	85	: Yugoslavia
668	640	572	650	683	702	734	892	: Total
								:

--Continued

Table 13--Trade in selected agricultural

Commodity and country	Imports							
	1968	1969	1970	1971	1972	1973	1974	1975
	<u>1,000 metric tons</u>							
Sugar <sup>8/</sup> :								
Bulgaria	364	358	403	305	160	232	212	295
Czechoslovakia	200	206	234	197	143	148	165	48
GDR	313	223	514	433	331	260	285	166
Hungary	14	16	37	198	145	174	200	198
Poland	21	30	12	43	22	28	28	43
Romania	55	68	98	119	76	78	90	48
Yugoslavia	74	37	11	155	295	380	69	136
Total	1,041	938	1,309	1,450	1,172	1,300	1,049	934
Tobacco:								
Bulgaria	2	1	5	6	12	5	7	9
Czechoslovakia	22	19	16	17	21	18	16	14
GDR	21	17	16	19	23	18	20	17
Hungary	12	10	8	8	9	9	9	8
Poland	5	4	3	3	3	7	4	10
Romania	1	1	2	5	2	2	7	2
Yugoslavia	9	3	4	5	6	2	2	6
Total	72	55	54	63	76	61	65	66

-- = No information reported, negligible, or none.

<sup>1/</sup> As reported by trading partners.

<sup>2/</sup> As reported by FAO.

<sup>3/</sup> Soybeans only as reported by trading partners.

<sup>4/</sup> Includes millfeed.



commodities, Eastern Europe, 1968-75--Continued

Exports									Commodity and country
1968	1969	1970	1971	1972	1973	1974	1975		
1,000 metric tons									
									: Sugar 8/:
13	--	20	36	--	--	--	--		: Bulgaria
312	300	350	320	229	225	189	227		: Czechoslovakia
169	190	212	144	158	120	186	64		: GDR
18	51	23	2	--	--	10	7		: Hungary
703	322	323	88	332	422	183	150		: Poland
69	113	43	11	170	105	48	28		: Romania
14	47	61	42	--	--	--	--		: Yugoslavia
1,298	1,023	1,032	643	889	872	616	476		: Total
									: Tobacco:
69	60	58	62	63	69	69	71		: Bulgaria
1	2	1	--	3	1	2	--		: Czechoslovakia
2	3	2	2	2	2	2	2		: GDR
7	7	9	6	3	2	1	1		: Hungary
8	9	10	12	9	12	13	10		: Poland
11	6	4	1	3	6	6	9		: Romania
16	14	19	20	17	18	19	24		: Yugoslavia
114	101	103	103	100	110	112	117		: Total

5/ Thousand pieces.

6/ Converted from metric tons to pieces at 20 kilograms per piece.

7/ Includes poultry meat.

8/ Raw value. From the International Sugar Organization.

Table 14--Volume and value of U.S. agricultural exports

[illegible]

Footnotes at end of table.

to Eastern Europe, including transshipments, 1969-76 1/

1969	1970	1971	1972	1973	1974	1975	1976 <u>2/</u>	Commodity and country
1,000 U.S. dollars								
--	--	--	--	--	--	--	--	:Wheat:
--	--	--	--	4,958	--	1,576	20,875	: Bulgaria
--	347	19	8,829	33,760	2,244	58,074	107,297	: Czechoslovakia
--	269	--	--	--	--	--	--	: GDR
--	377	--	8,493	66,319	18,589	80,296	93,895	: Hungary
--	9,143	19,539	1,440	--	--	11,793	48,453	: Poland
--	44	23,556	22,517	49,557	24,396	--	--	: Romania
--	10,180	43,114	41,279	154,594	45,229	151,739	270,520	: Yugoslavia
								: Total
--	--	1	--	--	9,964	14,780	34,204	:Feed grains:
--	1,564	15,840	4,963	3,066	672	39	91,570	: Bulgaria
21,794	13,558	22,302	30,500	68,188	149,918	229,950	211,415	: Czechoslovakia
--	69	--	--	2,498	--	24	411	: GDR
8,130	5,450	25,277	16,331	71,962	86,652	181,359	252,940	: Hungary
--	15,738	1,569	9,621	8,611	70,351	69,585	25,586	: Poland
--	3,496	17,465	22,537	--	6,225	--	139	: Romania
29,924	39,875	82,454	83,952	154,325	323,782	495,737	616,265	: Yugoslavia
								: Total
--	--	1	--	--	9,964	14,780	34,204	:Total grain:
--	1,564	15,840	4,963	8,024	672	1,615	112,445	: Bulgaria
21,794	13,905	22,321	39,329	101,948	152,162	288,024	318,712	: Czechoslovakia
--	338	--	--	2,498	--	24	411	: GDR
8,130	5,827	25,277	24,824	138,281	105,241	261,655	346,835	: Hungary
--	24,881	21,108	11,061	8,611	70,351	81,378	74,039	: Poland
--	3,540	41,021	45,054	49,577	30,621	--	139	: Romania
29,924	50,055	125,568	125,194	308,919	369,011	647,476	886,785	: Yugoslavia
								: Total
--	76	--	--	--	69	--	2	:Oilseeds:
1,058	1,609	1,153	13,120	6,400	22,872	18,039	7,114	: Bulgaria
961	920	1,697	--	16,160	11,382	--	840	: Czechoslovakia
--	3,966	1,487	157	--	96	27	--	: GDR
8,972	10,544	7,665	12,924	28,626	42,611	35,082	12,581	: Hungary
--	--	--	1	5,745	--	3,506	46,887	: Poland
--	24	5,245	217	--	2	1,708	--	: Romania
10,991	17,139	17,247	26,419	56,931	77,032	58,362	67,424	: Yugoslavia
								: Total
--	--	--	--	--	--	--	--	:Vegetable oil:
1	--	--	155	--	--	--	--	: Bulgaria
--	--	--	--	--	--	--	--	: Czechoslovakia
--	107	--	--	--	--	--	--	: GDR
747	7,536	5,701	7,287	13,192	7,373	11,126	4,725	: Hungary
--	--	--	--	--	--	--	--	: Poland
1	14,731	26,743	28,521	8,590	24,963	34,570	--	: Romania
749	22,374	32,444	35,963	21,782	32,336	45,696	4,725	: Yugoslavia
								: Total

--Continued



Table 14--Volume and value of U.S. agricultural exports

[illegible]

to Eastern Europe, including transshipments, 1969-76 <sup>1/</sup>

1969	1970	1971	1972	1973	1974	1975	1976 <sup>2/</sup>	Commodity and country
1,000 U.S. dollars								
2,313	5,293	1,033	--	--	3,181	3,544	1,590	: Oilcake and Meal:
9	5,665	7,230	14,634	38,465	33,290	50,824	33,139	: Bulgaria
--	5,155	2,151	--	10,765	45,966	51,964	36,607	: Czechoslovakia
3,498	15,107	15,093	6,619	14,721	26,226	34,908	20,610	: GDR
8,537	9,179	9,490	12,987	78,577	62,994	65,632	80,842	: Hungary
787	--	--	5,513	28,449	25,455	1,886	17,702	: Poland
12,209	18,182	11,940	15,939	35,222	48,155	2,327	27,057	: Romania
27,353	58,581	46,937	55,692	206,199	245,267	211,085	217,547	: Yugoslavia
								: Total
--	--	--	1	--	--	--	--	: Cotton, exclud-
--	--	--	--	--	--	--	--	: ing lintens <sup>4/</sup> :
--	--	--	--	--	--	--	--	: Bulgaria
--	--	--	--	--	--	--	--	: Czechoslovakia
--	--	--	--	--	--	--	--	: GDR
3,548	5,733	--	7,736	8,448	9,262	4,131	9,842	: Hungary
--	6,732	8,060	7,387	11,604	38,818	12,206	--	: Poland
6,787	--	286	--	--	--	--	--	: Romania
10,335	12,465	8,346	15,124	20,052	48,080	16,337	9,842	: Yugoslavia
								: Total
--	--	50	911	98	622	275	746	: Cattle hides:
2,805	4,020	5,412	13,022	15,904	9,678	8,034	11,115	: Bulgaria
40	125	228	--	274	45	195	159	: Czechoslovakia
11	298	906	1,154	1,686	4,213	1,432	3,486	: GDR
2,574	1,321	3,767	8,580	15,641	9,739	7,425	6,292	: Hungary
3,091	3,664	4,389	19,617	18,103	24,081	9,693	26,517	: Poland
2,898	4,333	1,912	3,072	4,441	4,212	1,548	5,080	: Romania
11,419	13,761	16,664	46,356	56,147	52,590	28,602	53,395	: Yugoslavia
								: Total
35	52	27	841	1,855	1,911	1,011	765	: Other:
632	343	910	3,936	2,361	3,567	6,226	8,488	: Bulgaria
1,902	1,671	1,834	1,666	3,267	5,485	3,545	8,533	: Czechoslovakia
296	820	1,481	2,527	2,641	7,213	4,096	4,024	: GDR
6,023	10,745	12,278	10,849	19,035	29,822	20,243	30,399	: Hungary
493	2,442	22	1,244	3,134	378	46	8,044	: Poland
992	3,984	5,234	4,499	5,281	7,576	3,271	5,222	: Romania
10,273	20,057	21,786	25,562	37,594	55,952	38,438	65,475	: Yugoslavia
								: Total
2,348	5,421	1,111	1,753	1,953	15,747	19,610	37,307	: Total agricul-
4,505	13,201	30,545	49,830	71,154	70,079	84,735	172,301	: tural exports:
24,597	21,776	28,196	40,995	132,414	215,040	343,728	364,851	: Bulgaria
3,805	20,636	18,932	10,453	21,546	37,748	40,487	28,531	: Czechoslovakia
38,531	50,885	63,178	85,187	301,800	268,042	383,566	491,516	: GDR
4,371	37,719	33,579	44,823	75,646	159,083	108,715	173,189	: Hungary
22,886	44,795	92,381	97,302	103,111	115,539	43,424	37,498	: Poland
101,043	194,433	267,922	330,343	707,624	881,278	1,024,265	1,305,193	: Romania
								: Yugoslavia
								: Total

<sup>1/</sup> Including transshipments through Canada, Netherlands, and West Germany.

<sup>2/</sup> Preliminary.

<sup>3/</sup> Running bales.

<sup>4/</sup> Thousand pieces.





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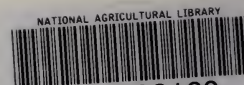
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